

Education

The Hong Kong University of Science and Technology

PhD. in Electronic and Computer Engineering

Supervisor: **Xiaomeng Li**

Clear Water Bay, Kowloon, Hong Kong

Sep 2021 - July 2025

Xidian University

Master of Information and Communication Engineering

Adviser: **Xinbo Gao; Nannan Wang**

GPA: 90.05/100; Rank: 45/654

Xian, China

Sep 2018 - July 2021

Xidian University

B.E. in Software Engineering

GPA: 90.67/100; Rank: 2/67

Xian, China

Aug 2014 - July 2018

Work Experience

The Hong Kong University of Science and Technology

Post-doctoral Fellow

Hong Kong SAR, China

August 2025 -

Huawei Noah Ark's Lab

Research Intern

Hong Kong SAR, China

May 2024 – May 2025

DAMO Academy, Alibaba Group

Research Intern

Hangzhou, China

July 2020 – July 2021

Research Interests

Video Understanding, Multimodal Large Language Models, Computer Vision, Medical Image Processing

Selected Publications

1. **Xinpeng Ding**, Jinahua Han, Hang Xu, Wei Zhang and Xiaomeng Li. *HiLM-D: Towards High-Resolution Understanding in Multimodal Large Language Models for Autonomous Driving*. International Journal of Computer Vision (IJCV), 2025.
2. **Xinpeng Ding**, Jinahua Han, Hang Xu, Xiaodan Liang, Wei Zhang and Xiaomeng Li. *Holistic Autonomous Driving Understanding by Bird's-Eye-View Injected Multi-Modal Large Models*. Conference on Computer Vision and Pattern Recognition (CVPR), 2024.
3. **Xinpeng Ding**, Jingwen Yang, Xiaowei Hu and Xiaomeng Li. *Learning Shadow Correspondence for Video Shadow Detection*. European Conference on Computer Vision (ECCV), 2022.
4. **Xinpeng Ding**, Nannan Wang, Shiwei Zhang, De Cheng, Xiaomeng Li, Ziyuan Huang, Mingqian Tang and Xinbo Gao. *Support-Set Based Cross-Supervision for Video Grounding*. International Conference on Computer Vision (ICCV), 2021.
5. Runhui Huang, **Xinpeng Ding (Equal contribution)**, Chunwei Wang, Jinahua Han, Hengshuang Zhao, Hang Xu, Lu Hou, Wei Zhang and Xiaodan Liang. *Hires-llava: Restoring fragmentation input in high-resolution large vision-language models*. Conference on Computer Vision and Pattern Recognition (CVPR), 2025.
6. Jiewen Yang, **Xinpeng Ding**, Ziyang Zheng, Xiaowei Xu and Xiaomeng Li. *GraphEcho: Graph-Driven Unsupervised Domain Adaptation for Echocardiogram Video Segmentation*. International Conference on Computer Vision (ICCV (Oral)), 2023.
7. Yi Li, Hualiang Wang, **Xinpeng Ding**, Haonan Wang and Xiaomeng Li. *Token Activation Map to Visually Explain Multimodal LLMs*. International Conference on Computer Vision (ICCV oral), 2025.
8. **Xinpeng Ding**, Nannan Wang, Xinbo Gao, Jie Li, Xiaoyu Wang and Tongliang Liu. *K-Farthest Crossover for Consistency-based Semi-supervised Temporal Action Localization*. IEEE Transactions on Image Processing (TIP), 2021.
9. **Xinpeng Ding**, Nannan Wang, Shiwei Zhang, Ziyuan Huang, Xiaomeng Li, Mingqian Tang and Xinbo Gao. *Exploring Language Hierarchy for Video Grounding* IEEE Transactions on Image Processing (TIP), 2022.

10. **Xinpeng Ding**, Nannan Wang, Xinbo Gao, Jie Li, Xiaoyu Wang and Tongliang Liu. *Group Feedback Capsule Network*. IEEE Transactions on Image Processing (**TIP**), 2020.
11. Hangyu Li, Nannan Wang, **Xinpeng Ding**, Xi Yang and Xinbo Gao. *Adaptively Learning Facial Expression Representation via CF Labels and Distillation*. IEEE Transactions on Image Processing (**TIP**), 2021.
12. Guozhang Li, Nannan Wang, **Xinpeng Ding**, Xinbo Gao, Jie Li and Zhifeng Li. *Multi-Hierarchical Category Model for Weakly-Supervised Temporal Action Localization*. IEEE Transactions on Image Processing (**TIP**), 2021.
13. **Xinpeng Ding**, Nannan Wang, Xinbo Gao, Jie Li and Xiaoyu Wang. *Group Reconstruction and Max-Pooling Residual Capsule Network*. International Joint Conference on Artificial Intelligence (**IJCAI**), 2019.
14. **Xinpeng Ding**, Xiaowei Xu and Xiaomeng Li. *Less is More: Surgical Phase Recognition from Timestamp Supervision*. IEEE Transactions on Medical Imaging (**TMI**), 2023.
15. **Xinpeng Ding** and Xiaomeng Li. *Exploring Segment-level Semantics for Online Phase Recognition from Surgical Videos*. IEEE Transactions on Medical Imaging (**TMI**), 2022.
16. **Xinpeng Ding**, Yongqiang Chu, Renjie Pi, Hualiang Wang and Xiaomeng Li. *HiA: Towards Chinese Multimodal LLMs for Comparative High-Resolution Joint Diagnosis*. International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2024.
17. **Xinpeng Ding**, Ziwei Liu and Xiaomeng Li. *Free Lunch for Surgical Video Understanding by Distilling Self-Supervisions*. International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2022.
18. Hualiang Wang, Yiqun Lin, **Xinpeng Ding** and Xiaomeng Li. *Tri-plane mamba: Efficiently adapting segment anything model for 3d medical images*. International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2024.
19. **Xinpeng Ding**, Xiaowei Xu and Xiaomeng Li. *SEDSkill: Surgical Events Driven Method for Skill Assessment from Thoracoscopic Surgical Videos*. International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2023.
20. Guozhang Li, De Cheng, **Xinpeng Ding**, Nannan Wang, Xiaoyu Wang and Xinbo Gao. *Boosting Weakly-Supervised Temporal Action Localization with Text Information*. Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023.
21. Guozhang Li, De Cheng, **Xinpeng Ding**, Nannan Wang, Jie Li, and Xinbo Gao. *Weakly Supervised Temporal Action Localization With Bidirectional Semantic Consistency Constraint*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), 2023.
22. Yiqun Lin, Jiewen Yang, Hualiang Wang, **Xinpeng Ding**, Wei Zhao and Xiaomeng Li. *C2rv: Cross-regional and cross-view learning for sparse-view CBCT reconstruction*. Conference on Computer Vision and Pattern Recognition (**CVPR**), 2024.
23. Weihang Dai, Xiaomeng Li, **Xinpeng Ding** and Kwang-Ting Cheng. *Cyclical Self-Supervision for Semi-Supervised Ejection Fraction Prediction from Echocardiogram Videos*. IEEE Transactions on Medical Imaging (**TMI**), 2022.

Academic Services

Served as a reviewer for TPAMI, IJCV, TIP, TNNLS, TMI, TCSVT, TGRS, etc.

Served as a reviewer for NeurIPS, ICLR, CVPR, ICCV, ECCV, AAAI, ACM MM, etc.

Honors and Awards

• HKUST Best Teaching Assistant Award	Sep 2022 - June 2023
• HKUST RedBird Academic Excellence Award	Sep 2022 - June 2023
• HKUST RedBird PhD Scholarship	Sep 2021 - June 2022
• Outstanding Postgraduates of Xidian University	June 2021
• National Scholarship of China, 2020	Sep 2019 - July 2020
• National Scholarship of China, 2019	Sep 2018 - July 2019
• National Scholarship of China, 2017	Sep 2016- July 2017
• ACM-ICPC Shannxi 2017, Bronze Award	May 2017
• China Collegiate Computing Contest-GPLT, Second Award	Mar 2017
• Mathematical Contest in Modeling (MCM), Honorable Mention	Feb 2017